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EXAMINER

CAO, PHUONG THAO

ART UNIT PAPER NUMBER

2164

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/621,959

Applicant(s)

SILVA-CRAIG ET AL.

Examiner

Phuong-Thao Cao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 37-54 and 57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 37-54 and 57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to Amendment filed on 7/13/2006.
2. Claims 37, 43, 45 and 53 have been amended. Currently, claims 37-54 and 57 are pending.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 37-54 and 57 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Straube et al. (Publication No US 2002/0007287) and further in view of Jamroga et al. (US Patent No 6,574,742).

As to claim 37, Straube et al. teach:

“A method for restoring medical data to a data source from a remote data store” (see Abstract),  
said method comprising:

“detecting an error in accessed medical data with a status monitor, wherein said status monitor is adapted to monitor operations occurring at said data source” (see [0038] wherein older data can be considered as an error, and a component which is equivalent to Applicant’s “status monitor” must be existed to detect these old data as disclosed);

“transferring a copy of said medical data from a remote data store to said data source based on a trigger, wherein said trigger is produced by said status monitor when said error is detected” (see [0037] and [0038] wherein local storage of data is equivalent to Applicant’s “data source” and data warehouse is equivalent to Applicant’s “remote data store”); and

“restoring said medical data by replacing said medical data at said data source with said copy of said medical data” (see [0038] wherein data downloaded must be stored and replaced old data on the local computer; also see [0039]).

Straube et al. do not teach “arbitrating access to said medical data among multiple data request”.

Jamroga et al. teach “arbitrating access to said medical data among multiple data requests” (see [column 5, lines 20-25], and [column 13, lines 1-5 and 45-50]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Straube et al. by the teaching of Jamroga et al. to add the feature of arbitrating access to said medical data among multiple data requests since this feature

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allows the system to control effectively data access and process more effectively multiple requests.

6. Claims 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levi et al. (US Patent No 6,804,778) and further in view of Jamroga et al. (US Patent No 6,574,742).

As to claim 37, Levi et al. teach:

“A method for restoring data to a data source from a remote data store” (see [column 12, lines 47-55] wherein backup data allow the restoration of data), said method comprising:

“detecting an error in accessed data with a status monitor, wherein said status monitor is adapted to monitor operation occurring at said data source” (see [column 6, lines 25-45], [column 7, lines 10-30], [column 10, lines 50-50] and [column 11, lines 60-67] wherein output monitor is equivalent to Applicant’s “status monitor” since output monitor detects incorrect data and monitor the data retrieved from data store of site 22 [column 6, lines 26-29] to verify only correct data is transmitted to clients and error is detected when retrieved data do not match the signature as disclosed);

“transferring a copy of said data from a remote data store to said data source based on a trigger, wherein said trigger is produced by said status monitor when said error is detected” (see [column 12, lines 47-63] wherein secure location maintaining the backup data is equivalent to Applicant’s “remote data store”, site database is equivalent to Applicant’s “data source”, and data must be transferred from secure location to site database to be able to replace the site database with backup data as disclosed; and wherein “if data corruption is detected, a copy of the

data is used to replace the site database, possibly automatically” [column 12, lines 62-64] suggest the inclusion of the trigger as illustrated in Applicant’s claim language); and

“restoring said medical data by replacing said data at said data source with said copy of said data” (see [column 12, lines 52-65] wherein site database is equivalent to Applicant’s “data source”).

Levi et al. do not teach data as specifically as medical data.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Levi et al. to handle medical data since medical data is equivalent to data and data quality assurance is very important in medical field wherein the correctness of medical data plays a significant role in diagnosis and treatment.

Levi et al. as modified do not teach “arbitrating access to said medical data among multiple data request”.

Jamroga et al. teach “arbitrating access to said medical data among multiple data requests” (see [column 5, lines 20-25], and [column 13, lines 1-5 and 45-50]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Levi et al. as modified by the teaching of Jamroga et al. to add the feature of arbitrating access to said medical data among multiple data requests since this feature allows the system to control effectively data access and process more effectively multiple requests.

As to claim 38, this claim is rejected based on arguments given above for rejected claim 37 and is similarly rejected including the following:

Levi et al. as modified teach:

“further comprising the step of obtaining said medical data at said data source and storing said medical data at said remote data store” (see [column 12, lines 52-55] wherein secure location is equivalent to Applicant’s “remote data store” and the process of backing up data includes obtaining data from a data source and storing data at another data storage).

As to claim 39, this claim is rejected based on arguments given above for rejected claim 37 and is similarly rejected including the following:

Levi et al. as modified teach:

“further comprising the step of copying said medical data to a second data source” (see [column 12, lines 52-55] wherein secure location is equivalent to Applicant’s “second data source”).

As to claim 40, this claim is rejected based on arguments given above for rejected claim 37 and is similarly rejected including the following:

Levi et al. as modified teach:

“wherein said transferring step further comprises verifying said transferring of medical data from said remote data store to said data source” (see [column 7, lines 60-65], [column 13, lines 20-30] and [column 16, lines 15-25] wherein remote location is equivalent to Applicant’s “remote data store” and site 22 is equivalent to Applicant’s “data source”).

As to claim 41, this claim is rejected based on arguments given above for rejected claim 37 and is similarly rejected including the following:

Levi et al. as modified teach:

“further comprising the step of authenticating access to said remote data store” (see [column 13, lines 53-55] where providing the signature to the remote site is a step of authenticating access to remote site; also see [column 16, lines 24-26]).

As to claim 42, this claim is rejected based on arguments given above for rejected claim 37 and is similarly rejected including the following:

Levi et al. as modified do not teach “wherein said transferring step further comprises transferring said medical data from a directory representative of said data source at said remote data source to said data source”.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Levi et al. as modified to add a directory representative of said data source at said remote data source so when data is transferred, it would be transferred as illustrated in Applicant's claim language, since using directory or folder is a popular way to organize and identify data in many file systems and hierarchical databases, and using the directory representative of said data source provide the system an effective way to identify data from a certain data source at the remote data store.



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7. Claims 43-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (Publication No US 2002/0019751), and further in view of Jamroga et al. (US Patent No 6,574,742).

As to claim 43, Rothschild et al. teach:

“A method for installing medical data from a first data source to a second data source” (see Abstract and [0052]), said method comprising:

“storing data remotely from a first data source to a remote data store” (see [0109] and [0110] wherein local image workstation is equivalent to Applicant’s “first data source” and central data management system is equivalent to Applicant’s “remote data store”);

“providing access to a second data source” (see [0121] remote image viewing system is equivalent to Applicant’s “second data source” and communicating via remote interface is equivalent to Applicant’s “access to a second data source”);

“detecting installation of said second data source with a status monitor, wherein said installation includes at least one of addition, upgrade and replacement of said second data source” (see [0131] wherein the normal delivery location is equivalent to Applicant’s “second data source”, and the location other than the normal delivery location, representing an additional delivery location to the normal delivery location, is equivalent to addition of said second data source as illustrated in Applicant’s claim language; allowing authorized individuals to access and pull data to these additional locations implies the “detecting installation” as illustrated in Applicant’s claim language);

“transferring said medical data from said remote data store to said second data source based on a trigger, wherein said trigger is produced by said status monitor when said installation is detected” (see [0131] and [0121] wherein remote workstation or viewer is equivalent to Applicant’s “second data source”, central data management system is equivalent to Applicant’s “remote data store”, and pulling is equivalent to the transferring as illustrated in Applicant’s claim language); and

“storing said medical data at said second data source” (see [0174] wherein remote image viewing system is equivalent to Applicant’s “second data source”).

Rothschild et al. do not teach “arbitrating access to said medical data among multiple data request”.

Jamroga et al. teach “arbitrating access to said medical data among multiple data requests” (see [column 5, lines 20-25], and [column 13, lines 1-5 and 45-50]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rothschild et al. by the teaching of Jamroga et al. to add the feature of arbitrating access to said medical data among multiple data requests since this feature allows the system to control effectively data access and process more effectively multiple requests.

As to claim 44, this claim is rejected based on arguments given above for rejected claim 43 and is similarly rejected including the following:

Rothschild et al. as modified do not teach “wherein said transferring step further comprises transferring said medical data from a directory representative of said first data source at said remote data source to said second data source”.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rothschild et al. as modified to add a directory representative of said data source at said remote data source so when data is transferred, it would be transferred as illustrated in Applicant’s claim language, since using directory or folder is a popular way to organize and identify data in many file systems and hierarchical databases, and using the directory representative of said data source provide the system an effective way to identify data from a certain data source at the remote data store.

As to claim 45, this claim is rejected based on arguments given above for rejected claim 43 and is similarly rejected including the following:

Rothschild et al. as modified teach:

“wherein said transferring step further comprises transferring files of medical data from said remote data store to said second data source” (see [0192] for the disclosure of delivered data file wherein delivered data file is the data for transmitting from the central data management system to remote viewing system wherein central data management system is equivalent to Applicant’s “remote data store” and remote viewing system is equivalent to Applicant’s “second data source”).

As to claim 46, this claim is rejected based on arguments given above for rejected claim 43 and is similarly rejected including the following:

Rothschild et al. as modified teach:

“wherein said transferring step further comprises transferring the entire contents of said first data source from said remote data store to said second data source” (see [0173] and [0174] wherein two central back-up sites 30' and 30'' can be considered as remote data and second data source and the storing of all electronic records on two sites reads on Applicant's claim language).

As to claim 47, this claim is rejected based on arguments given above for rejected claim 43 and is similarly rejected including the following:

Rothschild et al. as modified teach:

“wherein said transferring step further comprises verifying said transferring of medical data from said remote data store to said second data source” (see [0049], [0177] and [0178] wherein notification of successful delivery or receipt information is equivalent to verifying said transferring as illustrated in Applicant's claim language).

As to claim 48, this claim is rejected based on arguments given above for rejected claim 44 and is similarly rejected including the following:

Rothschild et al. as modified teach:

“further comprising the step of authenticating access to said remote data store” (see [0130] and [0131] wherein central data management system is equivalent to Applicant's “remote

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data store” and secure data access by authorized individuals is equivalent to Applicant’s  
“authenticating access”).

As to claim 49, this claim is rejected based on arguments given above for rejected claim 44 and is similarly rejected including the following:

Rothschild et al. teach:

“wherein said transferring step occurs after a definable interval” (see [0193] wherein delivery process is equivalent to Applicant’s “transferring step” and the disclosure of repeating the process implies the inclusion of “definable interval” as illustrated in Applicant’s claim language; also see [0187] wherein data requester request the transferring of data).

As to claim 50, this claim is rejected based on arguments given above for rejected claim 49 and is similarly rejected including the following:

Rothschild et al. as modified teach:

“wherein said definable interval comprises a timed interval” (see [0128], [0187] and [0197]).

As to claim 51, this claim is rejected based on arguments given above for rejected claim 49 and is similarly rejected including the following:

Rothschild et al. as modified teach:

“wherein said definable interval comprises an event-based interval” (see [0185], [0186], [0188], and [0197])

As to claim 52, this claim is rejected based on arguments given above for rejected claim 49 and is similarly rejected including the following:

Rothschild et al. as modified teach:

“wherein said definable interval comprises a manual interval” (see [0177] wherein the disclosure that customer is notified so appropriate actions can be taken to assure a quick delivery implies the inclusion of manual interval as illustrated in Applicant’s claim language).

8. Claims 53, 54 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (Publication No US 2002/0019751), further in view of Jamroga et al. (US Patent No 6,574,742), and further in view of Levi et al. (US Patent No 6,804,778).

As to claim 53, Rothschild et al. teach:

“A remote data retrieval system” (see [0102]), said system comprising:

“a centralized remote data store for storing medical data, the centralized remote data store storing data from a first data source” (see [0109], [0110] and [0174] wherein central data management system is equivalent to Applicant’s “centralized remote data store”, and local image workstation is equivalent to Applicant’s “first data source”);

“a second data source providing medical data” (see [0110] wherein remote image viewing system is equivalent to Applicant’s second data source”); and

“a status monitor for controlling a transfer of the medical data from the centralized remote data store to the second data source” (see e.g., [0184] and [0185] disclose a connection status monitor that control the delivery or transferring of medical data from central data management system to local or remote workstation wherein central data management system is

equivalent to Applicant's "centralized remote data store", and local or remote workstation is equivalent to Applicant's "second data source").

Rothschild et al. do not teach "wherein the status monitor is adapted to arbitrate access to said medical data among multiple data request".

Jamroga et al. teach "arbitrating access to said medical data among multiple data requests" (see [column 5, lines 20-25], and [column 13, lines 1-5 and 45-50]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rothschild et al. by the teaching of Jamroga et al. to add the feature of arbitrating access to said medical data among multiple data requests since this feature allows the system to control effectively data access and process more effectively multiple requests.

Rothschild et al. as modified do not teach "wherein the status monitor is adapted to detect and error in accessed medical data at the second data source, wherein the status monitor is adapted to trigger a restoration of medical data from the centralized remote data store to the second data source".

Levi et al. teach "wherein the status monitor is adapted to detect and error in accessed medical data at the second data source, wherein the status monitor is adapted to trigger a restoration of medical data from the centralized remote data store to the second data source" (see [column 6, lines 25-45], [column 7, lines 10-30], [column 10, lines 50-50] and [column 11, lines 60-67] wherein output monitor is equivalent to Applicant's "status monitor" since output monitor detects incorrect data and monitor the data retrieved from data store of site 22 [column 6, lines 26-29] to verify only correct data is transmitted to clients and error is detected when retrieved



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data do not match the signature as disclosed; and see [column 12, lines 47-63] wherein secure location maintaining the backup data is equivalent to Applicant's "remote data store", site database is equivalent to Applicant's "second data source", and "if data corruption is detected, a copy of the data is used to replace the site database, possibly automatically" [column 12, lines 62-64] suggest the inclusion of the trigger for restoring of data as illustrated in Applicant's claim language).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rothschild et al as modified by the teaching of Levi et al. for adding a feature to detect error of accessed data and trigger the restoration of the data since detecting error and enabling recovery of data assure the reliability and correctness of data which is very important in medical field. Error-free medical data allow medical profession more effectively and efficiently in diagnosis and treatment.

As to claim 54, this claim is rejected based on arguments given above for rejected claim 53 and is similarly rejected including the following:

Rothschild et al. as modified teach:

“wherein the first data source is equal to the second data source” (see [0173], [0174] and [0121] wherein local image workstation is equivalent to Applicant’s “first data source”, central storage system is equivalent to Applicant’s “remote data store”, remote storing system is equivalent to Applicant’s “second data source”, and the disclosure of redundant, physically separate locations where the images are stored implies the equality of those data sources as illustrated in Applicant’s claim language).

As to claim 57, this claim is rejected based on arguments given above for rejected claim 53 and is similarly rejected including the following:

Rothschild et al. as modified do not teach “wherein the centralized remote data store stores the medical data in a directory representative of the first data source”.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rothschild et al. as modified to add a directory representative of said data source at said remote data source so when data is transferred, it would be transferred as illustrated in Applicant’s claim language, since using directory or folder is a popular way to organize and identify data in many file systems and hierarchical databases, and using the directory representative of said data source provide the system an effective way to identify data from a certain data source at the remote data store.

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9. The prior art made of record and not replied upon is considered pertinent to Applicant's disclosure.

Quimette (US Patent No 4,653,112) teaches a mass data storage system for redundant storage including error detection and volume shadowing (creating duplicate copy).

*Conclusion*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong-Thao Cao whose telephone number is (571) 272-2735. The examiner can normally be reached on 8:30 AM - 5:00 PM (Mon - Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PTC

September 21, 2006

  
Primary Examiner  
Art Unit 2167